



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/523,149

01/24/2005

Yossi Kaplan

11001.1020

8803

35856

7590

12/16/2009

SMITH FROHWEIN TEMPEL GREENLEE BLAHA, LLC

Two Ravinia Drive

Suite 700

ATLANTA, GA 30346

EXAMINER

AJIBADE AKONAI, OLUMIDE

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

12/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,149	Applicant(s) KAPLAN ET AL.	
	Examiner OLUMIDE T. AJIBADE AKONAI	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-54 and 56-67 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 63 is/are allowed.
- 6) ☒ Claim(s) 41, 52 and 53 is/are rejected.
- 7) ☒ Claim(s) 42-51, 54, 56-62 and 64-67 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed September 1 2009 regarding claims 41 and 53 have been fully considered but they are not persuasive. Regarding claims 41 and 53, the applicant's representative asserts that Tang does not describe the comparison of sequences of events generated during a drive and analysis to overcome the problem of similar sequences for neighboring roads. The examiner respectfully disagrees. Claims 41 and 53 disclose conducting analysis of new cellular network events related to a particular mobile unit Tang reads on this limitation by comparing the MAHO vector to the RSSI information vector (see col. 5, lines 20-35). Therefore, Tang reads on the claimed limitation of conducting analysis on a sequence of cellular network events. The mobile telephone of Yang is not static as indicated by the applicant. The mobile telephone is able to handoff as it travels from one cell to another (see col. 3, lines 53-67). Therefore the mobile telephone receives the MAHO list within each cell. The examiner interprets the processing of new sequence of cellular network events as conducting analysis in order to correlate the new sequence of cellular network events to a physical geographic location, and this limitation is taught by Tang for the reasons disclosed above (it worth noting that the claim does not disclose what the processing entails, i.e., how is the processing accomplished; hence the interpretation of the limitation "whereas the new sequence of cellular network events is processed to overcome the problem of similar sequences"). The examiner also maintains that the MAHO list received by the mobile telephone

Art Unit: 2617

from the MSC broadly reads on the limitation handover related messages as the MAHO list includes the signal readings of the base stations of cells that the mobile telephone can handover to. The 35 U.S.C. 102(e) rejection of claims 41 and 53 is maintained.

Applicant's arguments, see page 10 of the remarks, filed September 1 2009, with respect to the rejection(s) of claim(s) 52 under 35 U.S.C. § 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of different interpretation of previously applied reference.

Applicant's arguments see pages 10-11 of the remarks, filed September 1 2009, with respect to claims 54, 60-62, and 66 have been fully considered and are persuasive. The 35 U.S.C. § 102(e) of claims 54 and 66 and the 35 U.S.C. § 103(a) of claims 60-62 has been withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 41, 52, and 53 are rejected under 35 U.S.C. 102(e) as being anticipated by **Tang 6,799,046**.

Regarding **claim 41**, Tang discloses a method for correlating a vehicle with the road on which it travels based on cellular communication, the method comprising the steps of: gathering a sequence of cellular network events related to one or more mobile units (dividing a cell into multiple sections and measuring the signal strength at each section location, see figs. 3-5, col. 4, lines 26-44), and a physical, geographically-defined, accurate location of each mobile unit determined by a physical geographically-defined, accurate location determination system when each cellular network event occurs (measuring the RSSI and recording the location information associated with the RSSI, see figs. 3-5, col. 4, lines 26-44 and 61-67, col. 5, lines 1-19), such cellular network events and physical, geographically-defined accurate locations being gathered during one or more drives and then stored as entries in a learnt database as a location reference (measuring the RSSI and recording the RSSI and the location associated with the measured RSSI in a profile database, see figs. 3-5, col. 4, lines 26-44 and 61-67, col. 5, lines 1-19); and conducting analysis of a new sequence of cellular network events related to a particular mobile unit, the new sequence of cellular network activity events being gathered during a new drive and is independent of physical, geographically-defined location information (a mobile telephone receiving MAHO list from MSC, see col. 5, lines 20-27), in conjunction with the learnt database to correlate the new sequence of cellular

Art Unit: 2617

network events to a physical geographic location (comparing the MAHO vector with the information profile database in order to determine a location of the mobile telephone, see figs. 3-5, col. 5, lines 20-49); whereas the new sequence of cellular network events is extrinsically collected from the base stations or the controllers or main switching systems or communication links between them (a mobile telephone receiving MAHO list from MSC, see col. 5, lines 20-27) and whereas the new sequence of cellular network events is processed to overcome the problem of similar sequences for neighboring routes (MAHO vector matching with the signal information profile database to determine if mobile telephone is in the same location as one of the locations in the signal information profile database see figs. 3-5, col. 5, lines 20-49).

Regarding **claim 53**, Tang discloses a method for correlating a vehicle with the road on which it travels based on cellular communication, the method comprising the steps of: gathering a sequence of cellular network events related to one or more mobile units (dividing a cell into multiple sections and measuring the signal strength at each section location, see figs. 3-5, col. 4, lines 26-44), and a physical, geographically-defined, accurate location of each mobile unit when each event occurs (measuring the RSSI and recording the location information associated with the RSSI, see figs. 3-5, col. 4, lines 26-44 and 61-67, col. 5, lines 1-19), and storing this information into a learnt database as location references (measuring the RSSI and recording the RSSI and the location associated with the measured RSSI in a profile database, see figs. 3-5, col. 4, lines 26-44 and 61-67, col. 5, lines 1-19); and conducting analysis of a new sequence of cellular

Art Unit: 2617

network events related to a particular mobile unit on a new drive independent of the physical, geographic location of the particular mobile unit (a mobile telephone receiving MAHO list from MSC, see col. 5, lines 20-27) in conjunction with the learnt database to identify a match (comparing the MAHO vector with the information profile database in order to determine a location of the mobile telephone, see figs. 3-5, col. 5, lines 20-49); wherein the new sequence of cellular network events is processed to overcome the problem of similar sequences for neighboring routes (MAHO vector matching with the signal information profile database to determine if mobile telephone is in the same location as one of the locations in the signal information profile database see figs. 3-5, col. 5, lines 20-49); and wherein the step of conducting analysis is based on extraction of handover related messages, only from the communication links between the switch and the base station controllers in a cellular network (a mobile telephone receiving MAHO list from MSC, see col. 5, lines 20-27).

Regarding **claim 52** as applied to claim 41, Tang further discloses wherein the step of conducting analysis is based only on a cell ID data (section location associated with the RSSI information, see fig. 5, col. 5, lines 3-19).

Allowable Subject Matter

4. Claims 47, 48, 50, 51, 54, 60-62, 65 and 66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 63 is allowed.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2617

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617